

REMARKS

The Applicant appreciates the thorough review of the application by the Examiner. The amendments satisfy the Examiner's requirements. No new matter has been added by the amendments. No new issues are raised by the amendments. The amendments address concerns raised by the Examiner in the Office Action. Reconsideration and allowance are respectfully requested.

The objection to the drawings has been overcome by the new change to Figure 5.

The 35 U.S.C. 112 rejections in paragraph 7 should be withdrawn.

It is clear in the application that the Applicant is referring to down-hole deep oil well ruggedized scintillators for use while drilling. For example, see page 13, lines 13-20.

Optical couplers 33 and 35 are described on page 10 and on the next to bottom line of page 9 and are materials that connect optical devices, such as the scintillators to the fibers. An amplifier 57, for example, is shown in Figure 4. A gamma or x-ray source 171 is shown in Figure 17 and described on page 17.

Claim rejections in paragraph 9 should be withdrawn. For example, fibers in claim 3 sufficiently long to reduce dark currents are described on page 4 lines 13 and 14. In claims 4 and 148, ruggedized construction for use in oil wells far below the earth and surface are described in Figures 8 and 11 and on pages 9 line 15, page 10 lines 6-7, page 13 lines 14-20, and page 14 lines 4-5.

Claims 55 and 151 have been corrected as suggested by the Examiner.

A letter to the Official Draftsman adds a drill to Figure 5 as described in the specification. The above amendment is limited to formal matters raised by the Examiner in the June 7, 2004 Office Action.

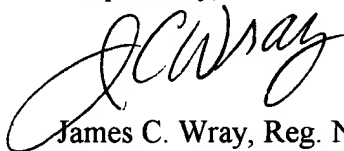
The distinctions between the invention and the four cited references and the lack of independent motivation for their combination, as previously pointed out on pages 40+ of the February 3, 2004 response, will be addressed in the Appeal Brief.

Applicant has presented a novel, unique and non-obvious invention.

CONCLUSION

Reconsideration and allowance are respectfully requested.

Respectfully,

A handwritten signature in black ink, appearing to read 'JC Wray', is written over the typed name.

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In the Drawings:

Kindly enter and approve the drawing corrections attached hereto.